

Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

STATE ORIGIN
AIR QUALITY PERMIT

Permittee Name: Tennessee Valley Authority
Mailing Address: 7900 Metropolis Lake Road, West Paducah,
Kentucky 42086-9414

Source Name: TVA-Shawnee Fossil Plant
Mailing Address: 7900 Metropolis Lake Road, West Paducah,
Kentucky 42086-9414
Source Location: 7900 Metropolis Lake Road, West Paducah

Plant ID #: 21-145-00006
SIC Code: 4911

Region: Paducah-Cairo
County: McCracken

Permit Number: S-00-042 (Revision 1)
Log Number: G561
Permit Type: Minor Construction/Operating at a Major Source

Issuance Date: March 31, 2000
Revision Date: May 29, 2001
Expiration Date: March 31, 2005

John E. Hornback, Director
Division for Air Quality

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete on March 20, 2000, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any emission units without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit 47 (42, 43, & 44) Coal/Pet Coke Handling Operations

Description:

Equipment includes: Discharge from Yard Conveyor to Elevating Conveyor, Discharge from Elevating Conveyor to Boom Conveyor and Discharge from Boom Conveyor to coal Storage Yard.

Controls: Enclosure and foam suppression carryover

Operating rate:

Discharge from Yard Conveyor to Elevating Conveyor	2500 tons per hour
Discharge from Elevating Conveyor to Boom Conveyor	2500 tons per hour
Discharge from Boom Conveyor to coal Storage Yard.	2500 tons per hour

Construction commenced: 1989

Applicable Requirements:

- a. Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 1. Application and maintenance of asphalt, application of water, foam or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling;
- b. Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of coal/pet coke received and processed.

5. Specific Record Keeping Requirements:

Records of the amount of coal/pet coke received and processed shall be maintained.

6. Specific Reporting Requirements:

See Section C.

7. Specific Control Equipment Operating Conditions:

- a. The control equipment including but not limited to enclosures and foam suppression carry over shall be operated as necessary to maintain compliance with applicable requirements in accordance with manufacturer's specification and/or standard operating practice.
- b. Records regarding the maintenance of the control equipment shall be maintained.
- c. See Section C for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit 48 (4,32,33, & 41) Coal/Pet Coke Handling Operations

Description:

Equipment includes: Screening and Crushing Building & Facilities, Rotary and/or Bottom Dump to Hopper at Railcar Unloader, Hopper Discharge to Conveyor BC-1 and Discharge from Conveyor BC-5 to Yard Conveyor or Auxiliary Stockout Conveyor.

Controls: Enclosure and foam suppression

Operating rate:

Screening and Crushing Building & Facilities	2500 tons per hour
Rotary and/or Bottom Dump to Hopper at Railcar Unloader	2500 tons per hour
Hopper Discharge to Conveyor BC-1	2500 tons per hour
Discharge from Conveyor BC-5 to Yard Conveyor or Auxiliary Stockout Conveyor.	2500 tons per hour

Proposed construction: April, 2000

Applicable Regulations:

State Regulation 401 KAR 60:005, Standards of performance for a new stationary sources, which incorporating by reference 40 CFR 60.250 (40 CFR 60 Subpart Y) applies to each of the effected facilities listed above.

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to Regulation 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, or transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

3. Testing Requirements:

Pursuant to Regulation 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity at least annually, or more frequently if requested by the Division.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each emissions unit on a weekly basis and maintain a log of the observations. If visible emissions from any emissions units are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making any necessary repairs.
- b. The permittee shall monitor the amount of coal/pet coke received and processed.

5. Specific Record Keeping Requirements:

Records of the amount of coal/pet coke received and processed shall be maintained.

6. Specific Reporting Requirements:

See Section C.

7. Specific Control Equipment Operating Conditions:

- a. The enclosures and foam suppression shall be used/operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the control equipment shall be maintained.
- c. See Section C for further requirements.

SECTION C - GENERAL CONDITIONS

A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be (a) violation(s) of State Regulation 401 KAR 50:035, Permits, Section 7(3)(d) and is grounds for an enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 50:035 Section 12]
3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035 Section 7(3)(k)]
4. The permit contained herein may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, re-issuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [401 KAR 50:035 Section 7(3)(f)]
5. The permit does not convey property rights or exclusive privileges. [401 KAR 50:035 Section 7(3)(g)]
6. The permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in State Regulation 401 KAR 50:038, Air emissions fee. [401 KAR 50:035 Section 7(3)(h)]
7. Nothing in this permit shall alter or affect the authority of the U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035 Section 8(3)(a)]
8. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035 Section 8(3)(b)]
9. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035 Section 7(2)(b)5]

SECTION C - GENERAL CONDITIONS (CONTINUED)

B. Recordkeeping Requirements

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035 Section 7(1)(d)2 and 401 KAR 50:035 Section 7(2)(c)]
2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to State Regulation 401 KAR 50:035, Permits, Section 6.

C. Reporting Requirements

1.
 - a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Paducah Regional Office concerning startups, shutdowns, or malfunctions as follows:
 - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1 a) above) to the Division for Air Quality's Paducah Regional Office.
2. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit, or to determine compliance with this permit. [401 KAR 50:035, Section 7(2)(b)3e and 401 KAR Section 7(3)(j)]

SECTION C - GENERAL CONDITIONS (CONTINUED)

3. Summary reports of any monitoring required by this permit shall be submitted to the Division's Paducah Regional Office no later than the six-month anniversary date of this permit, and after the initial reporting every January and July during the life of this permit, unless otherwise stated in this permit. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

D. Inspections

1. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or an authorized representative to perform the following:
 - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b. Have access to and copy, at reasonable times, any records required by the permit:
 - i. During normal office hours, and
 - ii. During periods of an emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency; and
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency.

E. Emergencies/Enforcement Provisions

1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [401 KAR 50:035 Section 7(3)(e)].

SECTION C - GENERAL CONDITIONS (CONTINUED)

2. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 9, an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency if the notice met the requirement of State Regulation 401 KAR 50:035, Permits, Section 7(1)(e)2, and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement.
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 50:035 Section 9(3)].

F. Compliance

1. Permit Shield - Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the affected facilities listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of the issuance of this permit.
2. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
 - a. Pursuant to State Regulation 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by State Regulation 401 KAR 50:055, Section 1.
 - b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non routine maintenance performed on each control device.

SECTION C - GENERAL CONDITIONS (CONTINUED)

3. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall annually complete and return a Compliance Certification Form (DEP 7007CC) to the Division's Paducah Regional Office in accordance with the following requirements:
 - a. Identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status regarding each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent; and
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - e. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Paducah Regional Office
4500 Clarks River Road
Paducah, KY 42003-0823

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

G. New Construction Requirements:

1. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 13(1), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Extensions of the time periods specified herein may be granted by the Division upon a satisfactory request showing that an extension is justified.
2. Pursuant to State Regulations 401 KAR 50:035, Permits, Section 7(2)(d) and 401 KAR 59:005, General provisions, Section 3(1), within 30 days following construction commencement, within 15 days following start-up and attainment of maximum production rate, or within 15 days following the issuance date of this permit, whichever is later, the owner and/or operator of the affected facilities specified on this permit shall furnish to the Division's Paducah Regional Office, with a copy to the Division's Frankfort Central Office, the following:
 - a. Date when construction commenced, (See General Condition G.1).
 - b. Start-up date of each of the affected facilities listed on this permit.
 - c. Date when maximum production rate was achieved, (See General Condition G.3.b).

SECTION C - GENERAL CONDITIONS (CONTINUED)

3.
 - a. Pursuant to State Regulation 401 KAR 59:005, General provisions, Section 2(1), this permit shall allow time for the initial start-up, operation and compliance demonstration of the affected facilities listed herein. However, within 60 days after achieving the maximum production rate at which the affected facilities will be operated, but not later than 180 days after initial start-up of such facilities, the owner or operator shall demonstrate compliance to a duly authorized representative of the Division.
 - b. Pursuant to State Regulation 401 KAR 59:005, General provisions, Section 3(1)(b), unless notification and justification to the contrary are received by this Division, the date of achieving the maximum production rate at which the affected facilities will be operated shall be deemed to be 30 days after initial start-up.
 4. Operation of the affected facilities authorized by this permit shall not commence until compliance with applicable standards specified herein has been demonstrated in accordance with the requirements of State Regulation 401 KAR 50:035, Permits, Section 13(4).